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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,859	06/11/2001	Simon Lok	AP33285	2657

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EXAMINER	
YIGDALL, MICHAEL J	

ART UNIT	PAPER NUMBER
2122	10

DATE MAILED: 12/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/878,859	LOK ET AL.	
	Examin r	Art Unit	
	Michael J. Yigdall	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 June 2001 and 24 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4,8,9*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. Claims 1-20 are pending and have been examined. The priority date considered for this application is 9 June 2000.

Specification

2. The abstract of the disclosure is objected to because the abstract must not exceed 150 words. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: The specification contains typographical errors. See, for example, "massages" on page 28, paragraph 52, which should be replaced with --messages--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 and 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,286,003 to Muta.

With respect to claim 1, Muta discloses a method for distributed processing through a server and a remote client wherein an application is executed entirely in the server (see Fig. 8 and column 1, lines 56-60), wherein the application is configured to interact with a user interface

toolkit according to an application programming interface (see column 11, lines 13-21, which shows part of the application interacting with the user interface based on an API), and wherein the user interface toolkit has a component that performs a function (see column 2, lines 45-49, which shows functions performed by components of the application), the method comprising:

(a) providing the user interface toolkit on the remote client such that the component is configured to perform the function on the remote client (see column 2, lines 37-44, which shows providing user interface software for performing functions on the remote client);

(b) providing a remote-capable user interface toolkit on the server by creating a remote-capable component which is configured to interact with the application according to the application programming interface and which is configured to generate a message to the component on the remote client to perform the respective function on the remote client (see column 2, lines 55-67, and column 3, lines 1-4, which shows providing remote-capable components on the server that interact with the software on the remote client and generate user interface commands or messages);

(c) invoking the remote-capable user interface toolkit by the application to perform a function according to the application programming interface (see column 10, lines 19-41, which shows sending an event to the remote-capable software on the server to invoke a function);

(d) generating the message to perform the function by the remote-capable component of the remote-capable user interface toolkit on the server in response to the invocation by the application (see column 10, lines 42-50, which shows generating a window message for performing the function in response to the event);

(e) communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client (see column 11, lines 29-49, which shows communicating a drawing command, i.e. a window message, to the remote client; and

(f) performing the function on the remote client by the component of the user interface toolkit in response to the message (see column 11, lines 50-62, which shows performing the user interface function on the remote client in response to the message).

With respect to claim 2, Muta further discloses the limitation wherein the component in the user interface toolkit is configured to render a graphical item and the remote-capable component is configured to generate a message to render the graphical item (see column 11, lines 50-62, which shows the component for rendering a graphical item; see also column 10, lines 56-67, which shows the remote-capable component for generating a message to render the graphical item), and wherein communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client comprises transmitting the message to the user interface toolkit on the remote client to render the graphical item (see column 11, lines 29-49, which shows a sender and a receiver for transmitting a drawing command, i.e. a message to render a graphical item).

With respect to claim 3, Muta further discloses the limitation wherein performing the function on the remote client by the component of the user interface toolkit comprises rendering the graphical item on the remote client in response to the message (see column 11, lines 50-62, which shows rendering the graphical item on the remote client in response to the received drawing command, i.e. the message).

With respect to claim 4, Muta further discloses the limitation wherein the component in the user interface toolkit is configured to install an event handler and the remote-capable component is configured to generate a message to install the event handler (see column 9, lines 26-35, which shows activating or installing an event monitor in response to a notice or message from the remote-capable component; see also column 9, lines 36-52, which further shows using an event handler function), and wherein communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client comprises transmitting the message to the user interface toolkit on the remote client to install an event handler (see column 9, lines 6-17, which shows transmitting the message).

With respect to claim 5, Muta further discloses the limitation wherein performing the function on the remote client by the component of the user interface toolkit comprises installing the event handler on the remote client in response to the message (see column 9, lines 26-35, which shows activating or installing an event monitor on the remote client in response to a received notice or message).

With respect to claim 6, Muta further discloses:

generating an event by the remote-capable component of the remote-capable user interface toolkit in response to the step of invoking (see column 10, lines 42-50, which shows generating a window message for performing the function in response to the event); and

wherein communicating the message between the remote-capable user interface toolkit on the server and the user interface toolkit on the remote client comprises asynchronously transmitting the event to the user interface toolkit (see column 10, lines 9-18, which shows

operating the event monitor and the event sender independently, i.e. sending or transmitting event messages asynchronously).

With respect to claim 10, see the explanation for claim 1 above. Note that Muta further discloses a distributed computer system having a server and a remote client (see items 240 and 210 of Fig. 2).

With respect to claims 11 and 14, see the explanation for claim 2 above.

With respect to claims 12 and 15, see the explanation for claim 2 above.

With respect to claims 13 and 16, see the explanation for claim 3 above.

With respect to claim 17, see the explanation for claim 4 above.

With respect to claim 18, see the explanation for claim 4 above.

With respect to claim 19, see the explanation for claim 5 above.

With respect to claim 20, see the explanation for claim 6 above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muta, as applied to claims 1-6 and 10-20 above, in view of U.S. Pat. No. 6,401,118 to Thomas.

With respect to claim 7, Muta does not disclose the limitation wherein the application is a database searching application configured to search a database for information in response to a user-defined request,

wherein the step of generating an event by the remote-capable component of the remote-capable user interface toolkit comprises identifying information from the database in response to the user-defined request; and

wherein the step of asynchronously transmitting the event to the user interface toolkit comprises asynchronously transmitting a message to the remote client to render the information from the database identified in the step of generating an event.

Muta does show generating an event and asynchronously transmitting a message from the remote-capable component to the remote client for rendering user interface information (see column 10, lines 10-50, which shows generating an event and transmitting a message; see also column 11, lines 29-62, which shows receiving the message and rendering the information).

Note that Muta discloses remotely controlling the graphical user interface of a server (see the abstract), which would include controlling GUI applications such as database searching applications.

Thomas discloses a system having a search server for identifying information in a database based on a user-defined request, and a remote client with a browser-based GUI for rendering the results (see Fig. 2 and column 2, lines 37-51), in which the server and client are distributed and operate independently for the purpose of improving throughput and availability (see column 2, lines 61-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Muta with the searching application taught by Thomas in a distributed computing environment, for the purpose of improving throughput and availability.

With respect to claim 8, Muta does not disclose the limitation wherein the application is a web browser and wherein the database is the World Wide Web,

wherein the step of identifying information from the database comprises identifying information from the World Wide Web; and

wherein the step of asynchronously transmitting a command to the remote client to render the information from the database comprises asynchronously transmitting a command to the remote client to render the information from the World Wide Web.

Muta does show generating an event and asynchronously transmitting a message from the remote-capable component to the remote client for rendering user interface information (see column 10, lines 10-50, which shows generating an event and transmitting a message; see also column 11, lines 29-62, which shows receiving the message and rendering the information). Muta further shows using a web browser (see item 213 of Fig. 3).

Note that Muta discloses remotely controlling the graphical user interface of a server (see the abstract), which would include controlling GUI applications such as database searching applications, including browsers used for searching the World Wide Web.

Thomas discloses a system having a search server for identifying information on the World Wide Web based on a user-defined request, and a remote client with a browser-based GUI for rendering the results (see Fig. 2 and column 2, lines 37-51), in which the server and client are

distributed and operate independently for the purpose of improving throughput and availability (see column 2, lines 61-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Muta with the searching application taught by Thomas in a distributed computing environment, for the purpose of improving throughput and availability.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muta, as applied to claims 1-6 and 10-20 above, in view of U.S. Pat. No. 6,011,918 to Cohen et al.

Muta does not disclose the limitation wherein the step of providing a remote-capable user interface toolkit on the server further comprises:

(a) providing a code-generating computer program configured to read in the code of the component of the user interface toolkit and to generate the remote-capable component of the remote-capable user interface toolkit by substituting a portion of the code relevant to executing the function with a portion of code configured to issue a remote command to execute the function;

(b) reading in the code of the component of the user interface toolkit;

(c) generating the remote-capable component of the remote-capable user interface toolkit by copying the code of the component and by substituting the portion of the code relevant to executing the function with the portion of code configured to issue the remote command to execute the function.

Muta does show providing a remote-capable user interface toolkit on the server (see column 2, lines 55-67, and column 3, lines 1-4, which shows providing remote-capable user

interface components on the server that interact with the software on the remote client). Muta further shows issuing remote commands to execute functions (see column 11, lines 29-62).

Cohen et al. discloses steps (a), (b) and (c) above in terms of automatically generating code for client/server applications (see column 3, lines 11-43, which shows a computer program for reading and analyzing class code and generating a client/server or remote-capable implementation), in order to enable a distributed application to support a plurality of computing topologies without needing to be redesigned (see column 2, lines 62-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Muta with the code generation features taught by Cohen et al., for the purpose of enabling a distributed application to support a plurality of computing topologies without needing to be redesigned.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. No. 6,385,643 to Jacobs et al. discloses a distributed computer system in which messages are communicated between a server and a remote client

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is (703) 305-0352. The examiner can normally be reached on Monday through Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MY

Michael J. Yigdall
Examiner
Art Unit 2122

mjy
December 18, 2003

JOHN CHAVIS
PATENT EXAMINER
ART UNIT 2124